bsi.
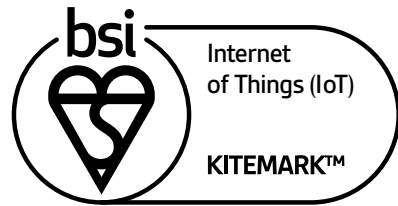
BSI Kitemark™ for IoT Devices

Build trust in your smart
and connected products for
the fire industry

The use of the Internet of Things (IoT) enabled devices is growing, helping to transform the ability to prevent and fight fire, make buildings safer and ultimately save lives.

In the built environment, the increased use of IoT enabled devices and components for fire safety systems can help identify where a fire has started and also identify how quickly it will spread. Connected fire fighter equipment can help transmit information such as the temperature or the location of a fire. It can also be fitted with cameras, enabling crews in the field to stream back vital information to a central command unit involved in coordinating a fire fighting operation.
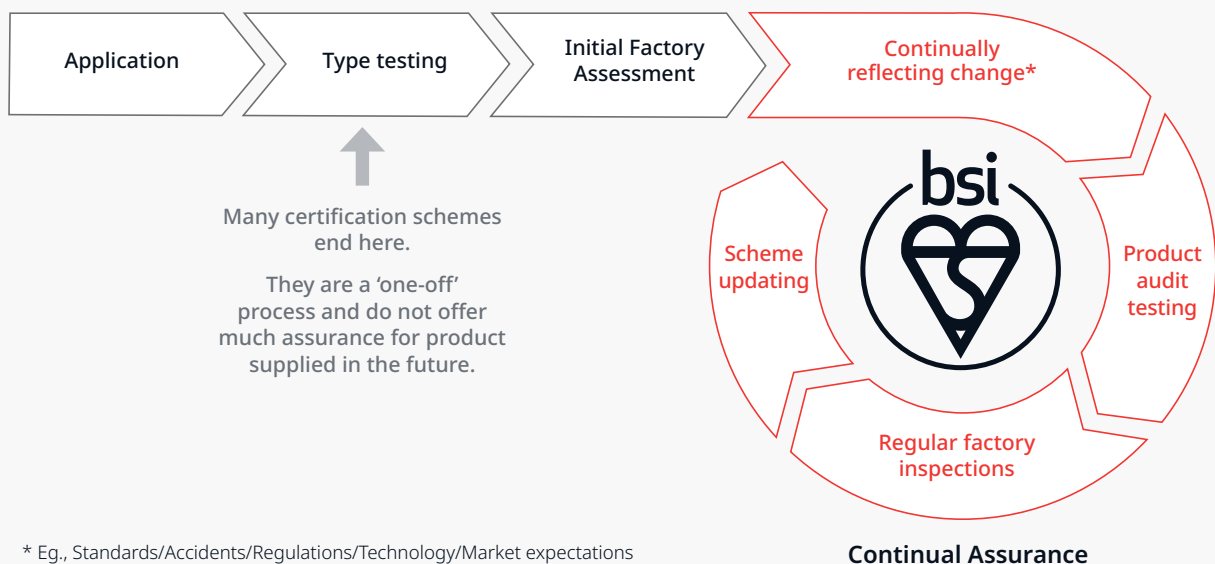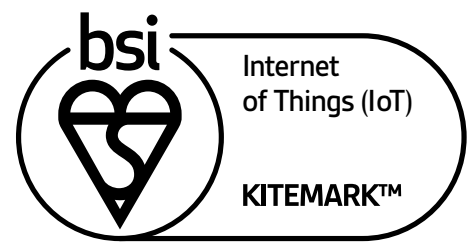
At home, IoT enabled devices such as smoke, heat, CO and CO2 alarms which send remote notifications when triggered, can help easily identify which devices were triggered and direct actions for help accordingly. Smart devices can also link fire and smoke detection devices to other home appliances. These, when triggered, can cut ignition sources preventing a dangerous situation from occurring.

However, all connected products are vulnerable to external threats. Cybersecurity presents a significant challenge. The increasing awareness of security problems can create a lack of trust in IoT connected devices and reduce business confidence in the return on investment of this technology.

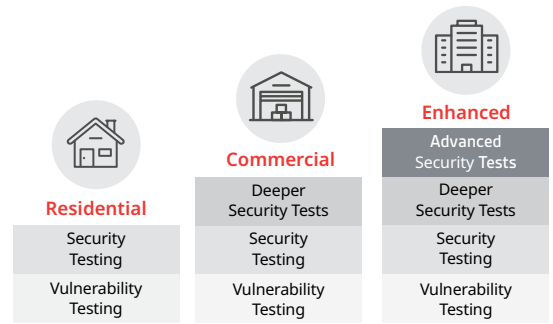## How can the BSI Kitemark for IoT Devices help?

The BSI Kitemark™ for IoT Devices is designed to help easily identify IoT devices that can be trusted to be safe, secure and functional. Including those devices designed to help prevent, detect and fight fire

The BSI Kitemark proves a product has been tested for functionality, interoperability and security. It also requires a Kitemark annual assessment, which includes: assessment against the scheme requirements identified for all protocols and levels associated with the product including full coverage of ETSI 303 645 and OWASP IOT Top 10 and a review of your quality management system. Robust and internationally recognized, the BSI Kitemark can help enhance a manufacturer's reputation and boost customer confidence.

bsi — Internet of Things (IoT) KITEMARK™

Application → Type testing → Initial Factory Assessment → Continually reflecting change*

Many certification schemes end here.

They are a 'one-off' process and do not offer much assurance for product supplied in the future.

Scheme updating

Product audit testing

Regular factory inspections

Continual Assurance

* Eg., Standards/Accidents/Regulations/Technology/Market expectations

There are three different types of BSI Kitemark for IoT Devices:

- **Residential** products used in a residential environment

- **Commercial** products used in a commercial environment

- **Enhanced** residential or commercial products for high value/ high risk applications

	Enhanced
	Advanced Security Tests
Commercial	Deeper Security Tests
	Deeper Security Tests
Residential	Security Testing	Security Testing	Security Testing
Security Testing	Vulnerability Testing	Vulnerability Testing	Vulnerability Testing
Vulnerability Testing			

To obtain the Kitemark you will need to:

1 Achieve and maintain compliance to ISO 9001 (quality management)

2 Pass the following tests:

- Functionality – relevant product performance and safety tests

- Interoperability – testing between devices and the internet

- Security – testing against best practices and security standards including scanning for known vulnerabilities and security flaws

3 Receive on-going, regular monitoring and assessment comprising:

- Functional/interoperability tests Penetration tests

- Kitemark audit to review testing results in context of the product, and review what actions have been taken

BSI in collaboration with the Fire Industry Association

Exclusive member benefits

BSI is collaborating with the Fire Industry Association (FIA) to provide members with exclusive discounts on certification to the BSI Kitemark for IoT Devices.

Certification and training is designed to benefit organizations looking to develop, test or launch fire safety products into the market, and for those wanting to train their teams on fire safety.

About FIA

The FIA is the largest fire protection trade association in the UK.

The not-for-profit organisation is a major provider of fire safety training, with an objective to promote, improve and perfect fire protection methods, devices, services and apparatus.

This is achieved through the representation of its members, providing technical support, guidance and opportunities for professional advancement through education and appropriate regulation.

Why BSI?

BSI has a world-class cyber security capability, recognized by CREST global accreditation, combined with decades of experience in testing and certification of fire detection and suppression products. We help you embed trust and confidence in your customers by supporting you in ensuring your products are safe, secure and compliant.

To find out more visit:

bsigroup.com/iot-uk

BSI Kitemark certification

Kitemark certification is exclusive to BSI and cannot be awarded by any other UKAS-accredited certification body.

Our laboratories carry out safety and performance testing of household and commercial electrical appliances and can help you achieve Kitemark certification.

Why apply for Kitemark certification? A gold standard of safety, performance, and reliability, it can differentiate you from competition. It has far reach as a quality and safety symbol and is a recognized equivalent to many global counterparts.

By Royal Charter

About BSI

BSI has been developing world-leading standards for over 100 years and continues to break new ground. Our blend of heritage and newness makes us unique – we are the only organization that can offer such a powerful combination of innovation and international reach.

We work closely with leading manufacturers to ensure their products meet the latest regulations to gain market access. We focus to delivering a testing and certification partnership underpinned by quality, safety, reliability, and accuracy aligned to your product development requirements. That's why we're best placed to help you understand standards and to meet the requirements.

At BSI we share knowledge, innovation, and best practice to help people and organizations realize their potential. We are client-centric, agile, and collaborative.

BSI: Inspiring trust for a more resilient world.

bsi.

Get in touch today and find out more

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